

approximately 2733 Da. as determined by ion-spray mass spectrometry, and the N-terminal amino acid sequence represented by SEQ ID NO: 1, or an antibacterial fragment or variant thereof which variant has greater than 80% amino acid sequence homology with said protein.

2. (Amended) An isolated antibacterial protein having the amino acid sequence of SEQ ID NO: 3 or an antibacterial fragment or variant thereof, which variant has greater than 80% amino acid sequence homology with said protein.

3. (Amended) An isolated antibacterial protein having the amino acid sequence of SEQ ID NO: 3, or a protein having 80% homology.

4. (Amended) An isolated antibacterial protein which has an amino acid sequence which differs from the sequence of SEQ ID NO 3 by the insertion, deletion or substitution of from one to three amino acids.

23. (Amended) A therapeutic formulation as claimed in claim 20 which includes one or both of Salivaricin A, an organism which can express Salivaricin A, the antibacterial protein which has the amino acid sequence of SEQ ID NO:5, or an organism which can express the antibacterial protein which has the amino acid sequence of SEQ ID NO:5.

27. (Amended) An organism, in substantially pure form, which includes a polynucleotide which:

- a) encodes a protein as claimed in any one of claims 1-6;
- b) comprises the coding sequence of SEQ ID NO:2; or
- c) encodes a protein as claimed in any one of claims 1-6, comprising the DNA sequence which encodes an antibacterial protein as claimed in claim 1, which is part of the genome of *S. salivarius* strain K12, on deposit at Deutsche Sammlung von Mikroorganismen Und Zellkulturen GmbH, Braunschweig, Germany, accession number DSM 13084.

35. (Amended) A method as claimed in claim 33 wherein said inhibitory effect is caused by colonising at least part of the upper respiratory tract of an individual with a viable organism in substantially pure form which expresses said protein.

40. (Amended) A method of treatment of a patient against infections of the upper respiratory tract caused by streptococcal organisms which comprises the steps of:

- (i) orally administering to said patient an amount of an antibiotic effective to reduce the numbers of streptococci present; and